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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,901	02/09/2001	Charlene A. Boehm	46607-248184	6758

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Charlene A. Boehm
320 Gilbert Road
Columbus, NC 28722

EXAMINER	
MORAN, MARJORIE A	
ART UNIT	PAPER NUMBER
1631	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/780,901	BOEHM, CHARLENE A.	
	Examiner	Art Unit	
	Marjorie A. Moran	1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-6,9,10 and 33-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-6,9,10 and 33-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *9/8/06*.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Objections

Claims 5, 9, 10, 33, 35, and 36 are objected to under 37 CFR 1.75(c), as being of improper dependent form for being multiply dependant but failing to recite the dependency in alternate format. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. For purposes of further examination, the claims will be interpreted as if they depended from alternate parent claims; e.g. claim 5 will be treated as if it recited "The method of claim 1 **or** claim 4..."

Claim Rejections - 35 USC § 112, 1st para

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 30-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a NEW MATTER rejection.

New claim 30 recites a method for determining resonant frequencies for treating an animal or human that suffers from a disease "with the presence of genomic material" which is new matter. It is unclear what is intended by the phrase "with the presence of genomic material" as set forth below. In light of the

specification and various interviews conducted with the inventor over the course of the examination process, and as amended claim 1 recites "disease caused by a pathogen," the examiner interprets the "disease" of new claim 30 to be any which is NOT specifically caused by a pathogen. The originally filed disclosure does not provide support for determining or calculating therapeutic resonance frequencies for treating any and all diseases of humans and/ or animals which are not known to be associated with or caused by a pathogen, whether that disease is one "with the presence of genomic material" or not. The original claims recited methods of influencing "target genomic material" but did not recite any limitations regarding disease. The originally filed specification discloses and exemplifies treatment of a variety of pathogens and pathogen-caused disorders on pages 20-23, thus providing full support for amended claim 1. However, the originally filed specification, on page 22, discloses resonance frequencies calculated for RNA and DNA of mammary oncogene int-1. Page 22 also discloses resonant frequencies for RNA of a tyrosine kinase gene , which the specification states "is known to be associated with cancer." It is noted that it is well known in the art that tyrosine kinase itself is not correlated to presence of cancer, but that ALTERED LEVELS of tyrosine kinase relative to normal tissue (i.e. overexpression) are found in certain types of tumor cells. Thus, while elevated levels of tyrosine kinase MAY be considered an indication of cancerous tissue, the gene encoding tyrosine kinase is not considered an oncogene, per se. Page 23 discloses treatment with resonant frequencies "related to" certain growth factors and a K-ras oncogene. Thus, at best, the originally filed specification

discloses resonant frequencies for treatment of cancer, in humans only, which are caused by *specific oncogenes* or associated with (altered levels) of tyrosine kinase. There is no disclosure anywhere for determination of resonance frequencies for any other non-pathogen associated disease or disorder, thus claim 30, which encompasses a much broader scope of diseases, recites new matter, and is rejected.

Genomic material which "worsens, or aggravates" a disease, as recited in new claim 30, is also new matter. As set forth above, the originally filed specification does discloses oncogenes, which is interpreted to be genomic material which "causes" a disease, as an oncogenes are defined by Merriam-Webster as a "gene having the potential to cause a normal cell to become cancerous." However, there is no disclosure anywhere for genomic material which "worsens, or aggravates" a disease, therefore claim 30 recites new matter, and is rejected.

Claim Rejections - 35 USC § 112

Claims 1, 4-6, 9, 10, and 30-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Amended claim 1 and new claim 30 recite, in a step of dividing or multiplying, the phrase "to influence said genomic material in an electromagnetic frequency range..." It is unclear what is intended to be "in" the electromagnetic frequency range; i.e. the second therapeutic resonant frequency, another

frequency, the genomic material, the "influence," or some other limitation. As the intended limitation is unclear, the claims are indefinite. If applicant intends that the second frequency be "in" the range capable of being emitted by the recited device, then this rejection may be overcome be inserting --, wherein the second therapeutic resonance frequency is-- between "genomic material" and "an electromagnetic frequency" in each claim.

Claims 5 and 33 recite a step of determining a refractive index, but fail to recite where or when in the method of any parent claim (i.e. claim 1, 4 , 30, or 32) the step of determining a refractive index is intended to occur. As the relationship between steps is unclear, claims 5 and 33 are indefinite.

Claims 5 and 33 recite an apparent limitation which "yields the first resonant frequency," however the calculation recited to "yield" the first resonance frequency is quite different from that recited in parent claims 1 and 30. It is unclear whether the limitation beginning "wherein dividing..." in line 4 and concluding with "the first resonance frequency" in each of claims 5 and 33 is intended to be an active method step or is merely intended to be a limitation of the first resonance frequency. If the latter, then it is unclear (a) what limitation of the claimed METHOD is intended, and (b) what limitation of the frequency is intended by reciting a calculation. If a method step is actually intended, then the step should be recited using an active, positive verb, and should be delineated from other steps on a separate, indented line. If applicant intends to limit the calcuation of the first resonant frequency, then it is further unclear whether the calculation of claims 5 and 33 is intended to replace that of claims 1 and 30,

respectively, or is intended to be an additional calculation. If it is intended to be an additional calculation, then is unclear in what way the additional calculation relates to the one recited in claim 1 or claim 30.

Claims 9, 10, 35, and 36 recite the limitation "said subharmonic or harmonic frequencies", in line 3 of claims 9 and 10, and in line 2 of claims 35 and 36. There is insufficient antecedent basis for this limitation in the claims. The claims depend from claim 1, claim 6, claim 30 or claim 34, but only claims 6 and 34 recite subharmonic and harmonic frequencies. Where claims 9 and 10 depend from claim 1, and where claims 35 and 35 depend from claim 30, there is no antecedent basis for "said subharmonic or harmonic frequencies" therefore claims 9, 10, 35, and 36 are indefinite.

Claim 30 recites treating "an animal or human that suffers from a disease with the presence of genomic material" in lines 2-3. It is unclear what is intended to be "with the presence of genomic material"; i.e. the animal or human, the disease, or the suffering, therefore the claim is indefinite.

Conclusion

No claims are allowed. All objections and rejections not reiterated above are hereby withdrawn.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marjorie A. Moran whose telephone number is (571) 272-0720. The examiner can normally be reached on Monday-Friday; 6 am-2:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (571)272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marjorie A. Moran
Primary Examiner
Art Unit 1631

Marjorie A. Moran

12/10/06